

Amendment and Response

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Serial No.: 10/000,057

Confirmation No.: 9505

Filed: November 1, 2001

For: ABRASION RESISTANT COATING FOR STACKS OF FIBER CEMENT SIDING**Amendments to the Claims**

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1-16. (Canceled)

17. (Previously Presented) A method of making a fiberboard cement siding product, comprising:

providing a fiberboard cement substrate,

coating a first major surface of the fiberboard cement substrate with a sealer;

coating the exposed surface of the sealer with a primer;

coating the exposed surface of the primer with a decorative coating;

coating the exposed surface of the decorative coating with a topcoat layer comprising a polyurethane dispersion; and

curing the topcoat layer to provide a mar and abrasion resistant coated fiberboard cement siding product; wherein the curing step comprises a thermal curing process that does not expose the siding to a board surface temperature in excess of 100 °C;

wherein the fiberboard cement substrate has a density of at least 1 g/cm³ and comprises wood pulp, silica and cement, and the outer topcoat layer has a dry thickness of at least 8 microns.

18. (Previously Presented) The method of claim 17, wherein the curing step comprises a thermal curing process that provides a board surface temperature of less than 100 °C.

19-20. (Canceled)

21. (Previously Presented) The method of claim 19 wherein the outer topcoat layer has a dry thickness of at least 10 microns.

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31. **(Previously Presented)** The method of claim 18, wherein the thermal curing process provides a board surface temperature of less than 80 °C.

32. **(Previously Presented)** The method of claim 31, wherein the thermal curing process provides a board surface temperature of less than 70 °C.

33. **(Previously Presented)** The method of claim 17, wherein the topcoat layer further comprises an abrasion resistance promoting adjuvant.

34. **(Previously Presented)** The method of claim 17, wherein the topcoat layer has a dry thickness of at least 5 microns.

35. **(Previously Presented)** The method of claim 34, wherein the topcoat layer has a dry thickness between 5 and 100 microns.

36. **(Previously Presented)** The method of claim 34, wherein the topcoat layer has a dry thickness of at least 7 microns.

37. **(Previously Presented)** The method of claim 36, wherein the topcoat layer has a dry thickness between 7 and 50 microns.

38. **(Previously Presented)** The method of claim 36, wherein the topcoat layer has a dry thickness of at least 8 microns.

39. **(Previously Presented)** The method of claim 38, wherein the topcoat layer has a dry thickness between 8 and 30 microns.

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40. **(Previously Presented)** The method of claim 38, wherein the topcoat layer has a dry thickness of at least 10 microns.
41. **(Previously Presented)** The method of claim 39, wherein the topcoat layer has a dry thickness between 10 and 25 microns.
42. **(Previously Presented)** The method of claim 17, wherein the polyurethane dispersion is an aliphatic isocyanate-based polyurethane dispersion.
43. **(Previously Presented)** The method of claim 17, wherein the polyurethane dispersion comprises a polyurethane having a number average molecular weight of at least 1800.
44. **(Previously Presented)** The method of claim 43, wherein the polyurethane dispersion comprises a polyurethane having a number average molecular weight of at least 5000.
45. **(Previously Presented)** The method of claim 44, wherein the polyurethane dispersion comprises a polyurethane having a number average molecular weight of at least 9000.
46. **(Previously Presented)** The method of claim 17, wherein the polyurethane dispersion comprises a polyurethane having an acid number between 6.5 and 80 mg KOH per gram solid polymer.
47. **(Previously Presented)** The method of claim 46, wherein the polyurethane dispersion comprises a polyurethane having an acid number between 9 and 50 mg KOH per gram solid polymer.

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48. **(Previously Presented)** The method of claim 47, wherein the polyurethane dispersion comprises a polyurethane having an acid number between 10 and 30 mg KOH per gram solid polymer.
49. **(Previously Presented)** The method of claim 17, wherein the topcoat layer has a pigment volume concentration of less than 20 percent.
50. **(Previously Presented)** The method of claim 49, wherein the topcoat layer has a pigment volume concentration of less than 15 percent.
51. **(Previously Presented)** The method of claim 17, further comprising stacking a first coated fiberboard cement siding product against a second coated fiberboard cement siding product.
52. **(Previously Presented)** A method of making a stack of fiberboard cement siding products, comprising:
- preparing two or more coated fiberboard cement siding products, the method comprising:
 - providing a fiberboard cement substrate;
 - optionally coating a first major surface of the fiberboard cement substrate with one or more layers comprising a sealer, a primer, or both;
 - coating one or more layers of a decorative coating to the outermost surface of the optionally coated fiberboard cement substrate layer;
 - coating the exposed surface of the one or more layers of a decorative coating with a topcoat layer comprising a polyurethane dispersion;
 - curing the topcoat layer to provide a mar and abrasion resistant coated fiberboard cement siding product; wherein the curing step comprises a thermal curing process that does not expose the siding to a board surface temperature in excess of 100 °C; and

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stacking the two or more coated fiberboard cement siding products to form a stack;
wherein the fiberboard cement substrate has a density of at least 1 g/cm³ and comprises wood pulp, silica and cement, and the outer topcoat layer has a dry thickness of at least 8 microns.